county. At his request, I gladly seize the opportunity to append his records here:—

2♂♂, 1 ♀, 1.viii.85, and 3♂♂, 6 ♀♀, 3.viii.85, all by sweeping *Sparganium erectum* at the edges of two ponds at Quy Fen, Cambs. (TL 513 628).

The flies were identified by Dr. Ian McLean. It will be noticed that the site of Mr. Perry's captures – close to water – differs considerably in character from that of the Norfolk occurrences. – A. A. A.]

"IT IS FOUND . . . . ON ALL SORTS OF LOW PLANTS"

By DENIS F. OWEN*

The above title could have been taken from almost anywhere in Richard South's *Moths of the British Isles* (Warne, London), first published nearly eighty years ago, and still the standard source of information on larval food-plants. In fact it comes from South's account of the food-plants of *Melanchra persicariae* (dot moth), one of the many species described as feeding on "low plants."

Table 1 summarises the families and species of plants utilised by the larvae of four species of Noctuidae in a garden** at Leicester in 1972-84. The four species, *Lacanobia oleracea* (bright-line brown-eye), *Mamestra brassicae* (cabbage moth), *Melanchra persicariae* (dot moth) and *Phlogophora meticulosa* (angle shades) are abundant in the garden and larvae are easily found by searching or beating the foliage of plants. The sample is not exactly random – some plants are easier to search than others – but is otherwise unselected, enabling generalisations to be made.

It is apparent that each of the four species of moths exploits an exceedingly wide range of families and species of plants. Not all could be described as "low plants", as included in the list are such species as *Malus sylvestris* (apple), *Sambucus nigra* (elder) and *Betula pendula* (birch). What is especially apparent is that the larvae of these moths are in every sense generalist feeders, even though a further 43 families of plants are recorded from the garden and are not listed as food-plants. Each moth exhibits what appears to be an indiscriminate choice of food-plants, and yet only six of the 35 families scored are used by all four species, eight by three species, nine by two species, and the

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remainder by one species only. Furthermore the number of plant species utilised from each family is small compared to the number available; why, for example, with 54 available species of Compositae, are only 8, 7, 8, and 7, respectively, recorded as foodplants? Finally, although these moths are good examples of South's "low plant" feeders, they also occur on woody vegetation and ferns, although never (in this garden) on grasses and conifers.

		Species eaten by			
Plant family	Species of plant in garden	Lacanobia oleracea	Mamestra brassicae	Melanchra persicariae	Phlogophora meticulosa
Aceraceae	1	–	1	–	–
Berberidaceae	2	1	1	–	–
Betulaceae	2	1	–	1	–
Boraginaceae	6	1	1	1	3
Buddleiaceae	1	1	1	1	1
Cannabaceae	1	–	1	1	–
Caprifoliaceae	4	–	1	1	–
Caryophyllaceae	11	1	–	–	1
Chenopodiaceae	4	1	1	1	–
Compositae	54	8	7	8	7
Convolvulaceae	3	2	1	–	1
Crassulaceae	6	–	1	–	1
Cruciferae	18	2	1	1	6
Dipsacaceae	1	1	–	–	–
Geraniaceae	2	1	–	–	–
Grossulariaceae	4	2	2	2	–
Guttiferae	3	–	–	1	–
Iridaceae	8	1	1	1	–
Labiatae	24	2	6	5	4
Leguminosae	15	2	3	1	–
Malvaceae	3	–	–	2	1
Oleaceae	5	–	–	1	–
Onagraceae	7	–	1	–	–
Oxalidaceae	2	1	–	–	–
Papaveraceae	6	–	1	–	1
Polypodaceae	1	–	–	1	–
Polygonaceae	6	1	–	–	–
Ranunculaceae	10	1	1	1	–
Rosaceae	21	1	1	3	1
Salicaceae	3	–	–	1	–
Saxifragaceae	5	–	–	1	–
Scrophulariaceae	11	–	–	–	2
Solanaceae	14	3	1	1	–
Umbelliferae	9	1	1	–	2
Urticaceae	2	–	1	1	–
Families	35	21	22	22	13
Species	275	35	36	37	31

Table 1. Larval foodplants of four British noctuids.